UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MASSACHUSETTS

LAURA ALLEN, INDIVIDUALLY; And As ADMINISTRATRIX OF THE ESTATE OF DANIEL ALLEN; And AS NEXT FRIEND OF TAYLOR ALLEN AND DANIELLE ALLEN; And MARK ALLEN,

Plaintiffs;

CIVIL ACTION No.: 05-40048-FDS

MARTIN SURFACING, A Division of SOUTHWEST RECREATIONAL INDUSTRIES; SOUTHWEST RECREATIONAL INDUSTRIES, INC., d/b/a MARTIN SURFACING,

Defendants.

<u>DEFEENDANTS' REPLY BRIEF TO PLAINTIFFS' OPPOSITION TO</u> <u>DEFENDANTS' MOTIONS TO EXLUDE EXPERTS' TESTIMONY AT TRIAL</u>

I. QUALIFICATIONS

A. Requirements For Experts To Testify

An expert must be educated and experienced in the subject matter for which their testimony is offered. Whiting v. Boston Edison Company, 891 F.Supp 12, 24 (D.Mass. 1995) (hereinafter "Whiting"); citing O'Connor v. Commonwealth Edison Co., 807 F.Supp 1376, 1391 (C.D.III. 1992). The Plaintiff stated in her opposition brief that an expert merely needs to be experienced in the general field. This directly contradicts the findings in Whiting. "A witness must be shown to be sufficiently qualified by 'knowledge, skill, experience, training or education' before he will be permitted to give

expert testimony. <u>Fed. R. Evid. 702</u>. This means that a witness must be qualified in the specific subject for which his testimony is offered." <u>Whiting</u>, at 43. Moreover, the experts' opinions, which were created for this litigation, would be offered in evidence in a very narrow and specific subject matter, being whether Toluene hastens the onset of ALS.

a. Marcia Ratner

Dr. Ratner fails to meet the qualifications standard which is set out in Whiting.

She has not written any peer reviewed treatises on ALS. She does not have any experience relating to ALS, and as such she lacks the necessary qualifications to opine as to the cause of, or what hastens an onset of ALS.

The Plaintiffs state in PLAINTIFFS' OMNIBUS OPPOSITION TO

DEFENDANT'S MOTION TO EXCLUDE EXPERTS' TESTIMONY AT TRIAL

(hereinafter "Opposition") that Dr. Ratner was part of a peer reviewed article regarding
environmental factors on Huntington Disease. First, Dr. Ratner never provided a peer
reviewed opinion in that article. Second, Dr. Ratner was merely thanked for her
assistance (at page 5 of the article). Lastly, the paper only suggested that there is a
"possibility" that environmental agents "may" have an influence on Huntington's

Disease. (at page 3 of the article). The article cannot state this finding to a scientific
certainty, just to a mere possibility. It is ironic that the Plaintiff refers to this article to
support Dr. Ratner's opinion, given its conclusion regarding "possibilities" which "may"
influence Huntington's disease, not ALS.

Dr. Ratner cannot testify with any degree of scientific certainty that Toluene hastens the onset of ALS. The Plaintiffs have not cited one peer reviewed study that

stands for that proposition. Despite the Plaintiff's assertion that the Defendant should provide studies that opine the opposite proposition, the burden is on the Plaintiff to show causation, and not the Defendants burden to prove otherwise. In re. Berg Litigation v. E.I. Dupont De Nemours and Company, et al., 293 F.3d 1127, 1130 (9th Cir. 2002) (hereinafter "Berg") The Plaintiff's argument regarding its burden is inaccurate as a matter of law, and it is a clear (but untenable) attempt to shift the burden upon the Defendant to prove a negative. Id. Dr. Ratner's opinion is merely *ipse dixit* and a court may exclude such testimony. Polaino v. Bayer Corporation, 122 F.Supp.2d 63, 67 (D.Mass 2000) (hereinafter "Polaino").

Page 3 of 12

Mhiting and Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993)

(Hereinafter "Daubert"). She does not have the experience and education in the specific subject matter for which her testimony is offered. The Plaintiff has offered Dr. Ratner's testimony to show a causal relationship between the alleged toxins and ALS. She does not have any experience or education with ALS nor with Toluene. Her testimony offered on this subject is speculative. Therefore, Dr. Ratner's testimony is inadmissible as it does not meet the <u>Daubert</u> standards, and she should not be allowed to testify as an expert.

b. Christine Oliver

Dr. Oliver is not qualified to testify as in expert in this case because she does not possess any training or experience in the subject matter for which her testimony would be offered, being neuro-toxicology and epidemiology. Further, Dr. Oliver does not have any training or experience in the fields of ALS and Toluene. See <u>Dr. Oliver's Curriculum</u>

<u>Vitae</u> (hereinafter "Oliver's Curriculum"). She has never contributed to any study or text

5 Document 02 1 nea 12/14/2007 1 age 40

regarding Toluene. See <u>Oliver's Curriculum</u>. She is not an epidemiologist and has never offered any epidemiological studies. <u>See</u>, <u>generally</u>, <u>Oliver's Opinion</u>. While epidemiology is not absolutely required to prove causation, there should be other scientific ways to meet their required burden, such as clinical evidence or differential diagnosis. <u>Berg</u>, at1130; See <u>Glastetter v. Novartis Pharm. Corp.</u>, 252 F.3d 986, 992 (8th Cir. 2001); <u>In re Joint E. & S. Asbestos Litig.</u>, 964 F.2d 92, 97 (2nd Cir. 1992); <u>Brown v. Southeastern Pa. Transp. Auth.</u> (in re <u>Paoli R.R. Yard PCB Litig.</u>), 35 F.3d 717, 758 (3rd Cir. 1994); <u>Caraker v. Sandoz Pharms Corp.</u>, 188 F.Supp.2d 1026, 1033 (S.D. III. 2001). However, the Plaintiff in this case has not met her burden in causation by offering any evidence in the form of an expert in epidemiology and the related studies, or through clinical or through differential diagnosis evidence.

Dr. Oliver cannot testify as to whether the Defendant was negligent. The Plaintiff asserts that the expert can testify on industry practice because the Plaintiff claims Dr. Oliver is an expert in occupational medicine. However, the plaintiffs' assertion that the expert can testify on industry practices is a transparent attempt to have the expert opine on legal issues, which invades the province of the jury. <u>U.S. v. Mikutowicz.</u> 365 F.3d 65, 73 (1st. Cir. 2004) (hereinafter "Mikutowicz"). In this case it is irrelevant that the Plaintiff says the opinion is for the purpose of industry practices, because case law and the Federal Rules of Evidence bar them from offering an opinion on an element of the claim. <u>Id</u>.

c. William Ewing

The testimony that Mr. Ewing proposes is inadmissible because it would not assist the jury by providing relevant testimony. Magistrini v. One Hour Marinizing Dry Cleaning, 180 F.Supp.2d 584, 595 (D. N.J. 2002). Regardless of Mr. Ewing's educational experience, he does not have enough information, as he has admitted, to opine with any reasonable degree of scientific certainty the amount of vapors that allegedly migrate from the gymnasium to Coach Allen's office. Ewing Opinion, p. 4, para. 3. Mr. Ewing opines that vapors migrated to Coach Allen's office based solely on the symptoms experienced by Coach Allen and his co-workers. Ewing Opinion, p. 4. Any assertions, opinions and conclusions that would be offered in his testimony would be speculative and guesswork. Therefore, his testimony would only taint the jury with potentially misleading information. His testimony would not provide any information that would assist the jury in reaching a true and just verdict. See, U.S. v. Velasquez, 64 F.3d 844, 850 (3d Cir. 1995). Mr. Ewing states that he bases his decision, without any air sampling data, on the period during which the Plaintiff alleges that Coach Allen was exposed to Toluene. Ewing Opinion, p. 10. While he maintains that Coach Allen was exposed to significant concentrations of solvent vapors during the period in question, Mr. Ewing is unable to conclude, "whether Mr. Allen's exposure to any particular chemical was in excess of PEL or TLV." Ewing Opinion p. 11-12. Mr. Ewing's conclusions are not based on any scientific facts, but rather speculation. Therefore, Mr. Ewing should be precluded from testifying.

II. Causation

A. Definition of Causation and Burden of Proof

The Plaintiff must prove that toluene is the actual or proximate cause which hastened the onset of ALS in Mr. Allen. Black's Law Dictionary defines causation as; "The fact of being the cause of something produced or of happening. The act by which an effect is produced." "Causation under Massachusetts negligence law requires a showing that the defendant's conduct was a 'substantial factor' in bringing the alleged harm." Correia v. Fitzgerald, 354 F.3d 47 (D.Mass. 2003) quoting Tritsch v. Boston Edison Co., 363 Mass. 179, 293 (Mass. 1973). Furthermore, as Dr. Oliver concedes in her deposition, "Hastening the onset means that it causes it to occur earlier." Oliver Depostion, p. 48 lines 9-10 (emphasis supplied). "To prove causation in a toxic tort case, a plaintiff must show both that the alleged toxin is capable of causing injuries that suffered by the plaintiff in human beings subjected to the level of exposure as the plaintiff, and that the toxin was the cause of the plaintiff's injury." Berg, at 1130 quoting Bonner v. ISP Technologies, Inc., 259 F.3d 924, 928 (8th Cir. 2001). "A mere guess or conjecture by an expert witness in the form of a conclusion from basic facts that do not tend toward that conclusion anymore than toward a contrary one, has no evidential value." Toubiana v. Priestly, 402 Mass. 84 (1988). An expert must provide reliable basis to conclude that a substance caused or exacerbated the harm in question. Ruggiero v. Warner-Lambert, 424 F.3d 249, 254 (2nd Cir. 2005).

B. General Causation

1. Biological Plausibility

The Plaintiff states that this case is not about causation but rather about biological plausibility. (Opposition, page 12). Regardless, Plaintiffs must prove causation, even if

Page 7 of 12

via a biological plausibility theory. "The following steps are standard protocol to extrapolate from a theoretical toxic risk to a real world conclusion about causation:

> First, the toxicologist should analyze whether the disease can be related to chemical exposure by a biological plausibility. Second, the expert should examine if the plaintiff was exposed to the chemical in a manner that can lead to absorption into the body. Finally, the expert should offer an opinion as to whether the dose to which the plaintiff was exposed is sufficient to cause the disease." Paulino 122 F.Supp.2d 70 citing Reference Manual on Scientific Evidence, (Fed. Jud. Center 1994), at

The Plaintiff contradicts her causation argument (hastening the onset of ALS) by invoking the theory of biological plausibility which she assets means, simply: "a given agent can cause a disease." (Opposition, page 13). The Plaintiff continues the contradiction by arguing that, "biological plausibility implies that a known biological mechanism is capable of explaining the relationship between the cause and effect." (Opposition, page 13). Furthermore the Plaintiff argues that biological plausibility is a general inference of causation. Invocation of biological plausibility undermines, and serves to defeat the Plaintiff's causation theory on two fronts.

First, biological plausibility recognizes that a standard protocol must be used to support Plaintiffs' claims. No such protocol was used by Dr. Ratner, Dr. Oliver or Mr. Ewing, because as Mr. Ewing concedes, there is no foundation for its use given the lack of information regarding the alleged doses of toxic vapors Coach Allen was allegedly subjected to. Second, invocation of biological plausibility exposes the Plaintiff's attempts to circumvent her burden in proving general causation, as she has always alleged that the alleged exposure hastened the onset of ALS, rather than causing ALS. Regardless, her attempt to skirt this burden is unavailing.

The Plaintiff cannot prove causation simply through a theory that is effectively a "post hoc ergo propter hoc fallacy". Paulino, at 70. In Paulino, the plaintiff's expert opined that the plaintiff had been subjected to the harmful chemicals at issue on the basis that there was a close "temporal relationship" and the onset of the plaintiff's symptoms. Id. The court in Paulino found that, "an individual's actual or probable exposure to a toxic agent is essential in determining the effects of harmful substances." Id, at 70, quoting Reference Manual on Scientific Evidence, (Fed. Jud. Center 1994), at 206. However, Judge Stearns ruled it "an axiom of toxicology that assay of an individual's actual or probable exposure to a toxic agent is essential in determining the effects of harmful substances. Exposure can be measured or estimated in one of three ways." Id. at 70.

> "First, where direct measurements cannot be made, exposure can be measured by mathematical modeling, in which one uses a variety of physical factors to estimate the transport of the pollutant from the source to receptor. Second, exposure can be measured using direct measurements of the medium in question - air, water food, or soil. The third approach directly measures human receptors through some form of biological monitoring. such as blood levels or a urinary metabolite, which shows pollutant exposure." Paulino at 70 quoting Reference Manual on Scientific Evidence, (Fed. Jud. Center 1994), at 206.

The expert in Paulino never determined the actual concentrations of toxins and how much if any the plaintiff consumed. Paulino, at 70. The court in Paulino discredited the expert's theory because the theory was merely based on the temporal relationship to toxins and the plaintiff's disease in question. Id. Mr. Ewing concedes this factual flaw. (See, Ewing Opinion).

Thus, the Plaintiff's experts in this case should be discredited as their theory is only supported by the temporal relationship of the resurfacing of the gymnasium floor

Page 9 of 12

and the symptoms that Coach Allen and others allegedly exhibited and/or witnessed. None of the Plaintiff's experts opinions are based on the specific "source analysis" that the toxins were emitted or migrated to Coach Allen's office. In fact, Mr. Ewing stated that he could not tell that whether the amount of toxins in the air was in excess of PEL or TLV. Ewing Opinion, p. 11-12. The opinions of the Plaintiff's experts are based solely on speculation in regards to how much, if any, toxin Coach Allen was exposed to and how long he was exposed to them.

The plaintiff has failed to meet their burden to show causation in this case. There has been no evidence offered by the plaintiff that shows that Toluene or another any of the alleged toxins used by the Defendants causes ALS. It would be improper for the experts that the Plaintiffs have offered to testify as expected because their conclusions are merely theories based upon speculation.

2. Differential Diagnosis

In regard to the Plaintiff's arguments as to differential diagnoses, they fail as a matter of law. The court in <u>Ruggiero v. Warner-Lambert</u>, 424 F.3d 249, 255 (2nd Cir. 2005), defined the law on differential diagnoses in the following way:

"A differential diagnosis is a 'patient specific process of elimination that medical practitioners use to identify the 'most likely' cause of a set of signs and symptoms from a list of possible causes. Hall v. Baxter Healthcare Corp., 947 F. Supp 1387, 1413 (D. Or. 1996); Himes v. Consol. Rail Corp., 926 F.2d 262, 270 n. 6 (3rd Cir. 1991) (defining "differential diagnoses" as a "process whereby medical doctors experienced in diagnostic techniques provide testimony countering other possible causes...of the injuries at issue"). This method does not necessarily support an opinion on general causation, because, like any process of elimination, it assumes that that "the final, suspected 'cause', remaining after this process of elimination must actually be capable of causing the injury." Ruggiero, at 255 quoting Cavallo v. Star Enter., 892 F. Supp.

756, 771 (E.D. Va. 1995), affirmed on this ground, reversed on other grounds, 100 F.3d 1150 (4th Cir. 1996); Hall, 947 F. Supp. at 1413 (noting that a differential diagnosis "assumes that general causation has been proven for the list of possible causes it eliminates"). "Where an expert employs differential diagnoses to the "rule out" other potential causes for the injury at issue, he must also "rule in" the suspected cause, and do so using "scientifically valid methodology." Id.

The Plaintiff's experts have failed to provide or cite any evidence to support their opinions that the alleged toxins at issue cause ALS or hasten the onset of ALS. As stated above, under <u>Ruggiero</u>, the Plaintiff must "rule in" the toxins as a cause of the specified injuries "using scientifically valid methodology." <u>Id</u>. The Plaintiffs have failed to "rule in" any cause of ALS, nor employed any scientifically valid methodology, as their opinions were created exclusively for use in this case. Subsequently, <u>Ruggiero</u> also held the following:

"In General Electric Co. v. Joiner, 522 U.S. 136, 142-43 (1997) (hereinafter "Joiner"), held that, 'conclusions and methodology are not entirely distinct from one another,' and that 'a court may conclude that there is simply too great an analytical gap between the data and the opinion proffered.' Joiner, at 146. Following Joiner, we held that 'when an expert opinion is based on data, methodology, or studies that are simply inadequate to support the conclusions reached, <u>Daubert</u> and Rule 72 mandate the exclusion of that unreliable opinion testimony." <u>Amorgianos v. National Railroad</u>, 303 F.3d 256, 266 (2nd Cir 2002). <u>Ruggiero</u>, at 255.

In <u>Ruggiero</u>, the court excluded the testimony of the plaintiff's expert because he could not cite any studies or any other evidence that suggested that the injury in question could be caused by the narcotic in question. <u>Id</u>, at 251. Similarly, the Plaintiff in this case have failed to provide any data that supports their conclusions as, so the gap between the data, of which there is none, and the opinions that they have offered is enormous.

Therefore, this Honorable Court should preclude the Plaintiff's experts from testifying.

III. Conclusion

Wherefore, based on the aforementioned and the arguments set forth in Defendants' Daubert Motion for Summary Judgment and/or to Preclude Plaintiff's Expert Testimony of Dr. Christine Oliver, Defendants' Daubert Motion for Summary Judgment and/or to Preclude Plaintiff's Expert Testimony of Dr. Marci Ratner, Defendants' Daubert Motion for Summary Judgment and/or to Preclude Plaintiff's Expert Testimony of Mr. William Ewing, the Defendant, Southwest Recreational Industries, Inc. hereby moves this Honorable Court to grant summary judgment in its favor and to preclude the Plaintiff from introducing the opinions of expert witnesses Dr. Christine Oliver, Dr. Marcia Ratner and Mr. William Ewing.

Dated: December 14, 2007

Respectfully submitted, The Defendant. Southwest Recreational Industries, Inc. d/b/a Martin Surfacing

/s/ Michael L. Mahoney

Michael L. Mahoney Mullen & McGourty 52 Temple Place, 4th Floor Boston, MA 02111 (617) 338-9200 BBO# 557562

CERTIFICATE OF SERVICE

I, Michael L. Mahoney, hereby certify that I have served a true copy of the within document this 14th day of December, 2007 via electronic mail, upon the following:

Michael R. Hugo, Esq.
Ian McCallister, Esq.
Brent Coon and Associates
277 Dartmouth Street, 4th Floor
Boston, MA 02116

Anthony Tarricone, Esq. James Gotz, Esq. Kreindler & Kreindler, LLP 277 Dartmouth Street Boston, MA 02116

Mighael L. Mahoney